DOCUMENT RESUME

RC 021 092 ED 410 078

A Summary of Recommendations of the Federal-State Joint TITLE

Board on Universal Service: Support for Schools and

Libraries. RUPRI Telecommunications Policy Brief, P96-9.

Missouri Univ., Columbia. Rural Policy Research Inst. INSTITUTION

Nov 96 PUB DATE

13p.; For related documents, see RC 021 090 and RC 021 095. NOTE

Information Analyses (070) -- Legal/Legislative/Regulatory PUB TYPE

Materials (090)

MF01/PC01 Plus Postage. EDRS PRICE

*Economically Disadvantaged; Elementary Secondary Education; DESCRIPTORS

Equal Education; Federal Legislation; *Federal Regulation;

*Financial Support; Health Facilities; Hospitals;

Information Technology; Internet; Libraries; Public Policy;

*Rural Areas; Rural Schools; *Telecommunications

*Access to Services; Affordability; Federal Communications **IDENTIFIERS**

Commission; *Telecommunications Act 1996; Telecommunications

Policy

ABSTRACT

The Federal Communications Commission (FCC) appointed a Joint Board to recommend changes in existing FCC rules to fulfill the regulatory mandates of the Telecommunications Act of 1996. The Joint Board, which consists of three FCC commissioners, four State commissioners, and one consumer advocate, issued its recommendations to the FCC in a 500-page document in November 1996. Section X, "Support for Schools and Libraries," outlines recommendations to implement Congressional intent contained in Section 254(h), which provides for: (1) a redefinition of the basic services to which all Americans should have access; (2) affordable rates for rural (and other high-cost) customers; (3) a redefinition of the structure and management of the Universal Service Fund; and (4) a discount for services to schools, libraries, and health care providers, requiring that all have affordable communications rates. This policy brief outlines the full table of contents of the recommendations and summarizes the recommendations contained in Section X, which has the following subdivisions: (1) overview, (2) functionalities/services eligible for support, (3) intraschool and intralibrary connections, (4) discount methodology, (5) restrictions imposed on schools and libraries, (6) funding mechanisms for schools and libraries, (7) access to advanced telecommunications and information services, and (8) implementation. (TD)

Reproductions supplied by EDRS are the best that can be made

from the original document.





rural policy research institute

IOWA STATE UNIVERSITY • UNIVERSITY OF MISSOURI • UNIVERSITY OF NEBRASKA

November, 1996 RUPRI TELECOMMUNICATIONS POLICY BRIEF

P96-9

A SUMMARY OF RECOMMENDATIONS OF THE FEDERAL-STATE JOINT BOARD ON UNIVERSAL SERVICE: SUPPORT FOR SCHOOLS AND LIBRARIES

Complex laws such as the Telecommunications Act of 1996 require rule making by regulatory agencies prior to their implementation. In this case, the Federal Communications Commission (FCC) must determine the interstate rates, the services, and how to raise the funds necessary to pay for these services. Then, state Public Utility Commissions (PUC's) must determine the affordable rates, services, and fund-raising mechanisms for intrastate services. The FCC appointed a Joint State/Federal Board to recommend changes in existing FCC rules to fulfill these regulatory mandates. This special body, "The Joint Board," consists of three FCC Commissioners, four State Commissioners, and one consumer advocate. The Joint Board issued their recommendations to the FCC on November 8, 1996. The FCC is required to rule on these initial recommendations of the Joint Board by May, 1997.

This RUPRI Policy Brief outlines the Joint Board recommendations contained in Section X of this 500 page document. (The full table of contents is outlined below.) Section X: Support for Schools and Libraries outlines Joint Board recommendations to the FCC to implement Congressional intent contained in Section 254 (h) which provides for: (1) a redefinition of the basic services to which all Americans should have access; (2) "affordable" rates for rural (and other high-cost) customers; (3) a redefinition of the structure and management of the USF; and (4) a "discount" for services to schools, libraries, and health care providers, requiring that all have affordable communications rates. This Brief summarizes these recommendations.

TABLE OF CONTENTS: The 500-page document includes the following sections:

- I. INTRODUCTION I
- II. EXECUTIVE SUMMARY 3
- III. PRINCIPLES 13
 - A. Overview 13
 - B. Comments 14
 - C. Discussion 22
- IV. DEFINITION OF UNIVERSAL SERVICE: What Services to Support 28

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (FRIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

C. Fluharty

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

- A. Overview 28
- B. Services Proposed in the NPRM 29
- C. Other Services 54
- D. Feasibility of Providing Designated Services 71
- E. Extent of Universal Service Support 84
- F. Quality of Service 93
- G. Revisiting the Definition of Universal Service 93

V. AFFORDABILITY 112

- A. Overview 112
- B. Affordability 113

VI. CARRIERS ELIGIBLE FOR UNIVERSAL SERVICE SUPPORT 134

- A. Overview 134
- B. Eligible Telecommunications Carriers 135
- C. Definition of Service Areas 165
- D. Unserved Areas 179

VII. HIGH COST SUPPORT 183

- A. Overview 183
- B. Calculation of Cost 187
- C. Determining the Level of Support Using a Benchmark 299
- D. Competitive Bidding 318
- E. Transition 350

VIII. SUPPORT FOR LOW-INCOME CONSUMERS 357

- A. Overview 357
- B. Services to be Supported for Low-Income Consumers 359
- C. Reevaluation of Existing Low-Income Support Programs 395

IX. ISSUES UNIQUE TO INSULAR AREAS 430

X. SUPPORT FOR SCHOOLS AND LIBRARIES 438

- A. Overview 438
- B. Functionalities/Services Eligible for Discount 441
- C. Intra-School and Intra-Library Connections 466
- D. Discount Methodology 485
- E. Restrictions Imposed on Schools and Libraries 574
- F. Funding Mechanisms for Schools and Libraries 607
- G. Sections 706 and 708 614
- H. Access to Advanced Telecommunications and Information Services 621
- I. Implementation 630

XI. SUPPORT FOR HEALTH CARE PROVIDERS 631

- A. Overview 631
- B. Services Eligible for Support 634
- C. Implementing Support Mechanisms for Comparable Rates 658
- D. Eligibility 688
- E. Restrictions 717
- F. Access to Advanced Telecommunications and Information Services 737
- G. Implementation 751



٠. .

XII. INTERSTATE SUBSCRIBER LINE CHARGES AND CARRIER COMMON LINE CHARGES 753

XIII. ADMINISTRATION 777

- A. Overview 777
- B. Mandatory Contributors to Support Mechanisms 779
- C. Other Providers of Interstate Telecommunications 792
- D. The De Minimis Exemption 795
- E. Basis for Assessing Contributions 802
- F. Revenues Base for Assessing Contributions 814
- G. Administrator of Universal Service Support Mechanisms 824

XIV. CONCLUSION 834

XV. RECOMMENDING CLAUSES 835

APPENDIX A Parties Filing Initial Comments

APPENDIX B Parties Filing Reply Comments

APPENDIX C Parties Filing Further Comments

APPENDIX D Parties Filing Proxy Model Comments

APPENDIX E Parties Filing Initial and Reply Comments in CC Docket 80-286

APPENDIX F Analysis of Proxy Models

APPENDIX G Service List

X. SUPPORT FOR SCHOOLS AND LIBRARIES

The following summary lists key recommendations of the Joint Board contained in Section X. Support for Schools and Libraries.

B. Functionalities/Services Eligible for Support

The Joint Board recommends that:

- \$458 Schools and libraries should be given maximum flexibility to purchase whatever package of telecommunications services they believe will meet their needs most effectively and efficiently.
- ¶459 Supported technologies should NOT be limited to basic voice grade lines.
- \$\frac{1}{2}460\$ Discounts should be made available on all telecommunications services.
- \$\foatin{\pmathcal{T}}\$461 Wireless and wireline technologies should be included, allowing school and libraries to make the decision.



3

- ¶462/ Discounts for Internet access should be made available to schools and libraries. The discount should apply to basic conduit, i.e., non-content, access from the school or library to the backbone Internet network. This access should include the communications link to the Internet Service Provider--by dial-up access or leased line--and the subscription fee paid to the ISP, if applicable. The discount would also apply to electronic mail.
- ¶465 A discount mechanism for other information services (other than Internet access) should NOT be established at this time.

C. Intra-School and Intra-Library Connections

- \$473 Schools and libraries may receive discounts on charges for internal connections, e.g., "inside wiring".
- ¶474 Internal connections should be considered to be "services" rather than unregulated "facilities" because of the high proportion of installation and maintenance costs involved.
- ¶476 The provision of services by computer over the Internet falls within the definition of "advanced telecommunications and information services."
- \$\\$477/\$ Internal connections may include such items as routers, hubs, network file servers, and wireless LANs, but specifically excludes personal computers.
- ¶483 (The report acknowledges) that the support mechanism adopted by the FCC will permit many disadvantaged schools and libraries to pay below-cost rates for telecommunications services.
- \$\foatstarting{484}\$ Schools and libraries should be able to secure internal connections under the discount structure; universal service support should be given to any provider of internal connections that the school or library selects, not only those meeting the statutory definition of "telecommunications carrier."

D. Discount Methodology

a. Pre-discount Price

- ¶535 Carriers should receive the pre-discounted price for the services they sell to schools and libraries. While schools and libraries will pay the carrier a discounted rate, the carrier would receive the amount of the discount from universal service support mechanisms. Schools/libraries must pay the undiscounted portion of the price.
- \$536 (It is expected that) in a competitive marketplace, schools and libraries would have both the



- opportunity and the incentive to secure the lowest price charged to similarly situated non-residential customers for similar services.
- ¶537 (It is recognized that) permitting schools and libraries to aggregate with other local customers, such as health care providers, community colleges, or commercial banks may raise administrative difficulties in enforcing the eligibility and resale limitations that Congress imposed. Nevertheless, it is concluded that the benefits from such aggregation outweigh the administrative difficulties.
- \$538 Schools and libraries should be able to take full advantage of the competitive marketplace and aggregation with others to secure low-cost pre-discount prices for the services they desire.
- \$539 Schools and libraries should be required to seek competitive bids for all discounted services.
- ¶540 Carriers should provide service to a school or library at the lowest price charged to similarly situated non-residential customers for similar services (called "lowest corresponding price"). The lowest corresponding price would act as the ceiling on the pre-discount price offered to schools and libraries. Service providers would be required to self-certify to the administrator that the price offered to schools and libraries is no more than the lowest corresponding price, and no provider could seek to charge schools and libraries a price above that price.
- ¶541 The lowest corresponding price should also apply in areas in which competition does not exist. Schools, libraries, and carriers should be permitted to seek recourse from the FCC, regarding interstate rates, and to state commissions, regarding intrastate rates, if they believe that the lowest corresponding price is unfairly high or low. Schools and libraries may request lower rates if they believe the rate offered by the carrier does not represent the lowest corresponding price. Carriers may request higher rates if they believe that the lowest corresponding price is non-compensatory.
- ¶ 543 Schools and libraries may seek bids from any provider serving their "geographic area".

 "Geographic area" should be interpreted to mean the area in which the service provider is seeking to serve customers, e.g., the telephone or cable company's franchise areas and a wireless company's serving area.
- ¶ 544 There should be no reason to exclude carriers who do not provide core services, if they can offer eligible services to a school or library at the lowest rate.
- ¶ 545 TSLRIC (a method of determining the incremental cost of providing a specific service) should not be used to set the pre-discount price for services sought by schools and libraries. (The Joint Board favors discount from price rather than discount from cost.)

b. Discounts



- The FCC should adopt a percentage discount mechanism providing discounts from 20 percent to 90 percent, which can be applied to all telecommunications services, Internet access, and internal connections. The range of discounts should be correlated to the indicators of economic disadvantage and high cost for schools and libraries.
- ¶551 A minimal co-payment by the most economically disadvantaged schools and libraries will assure that the Universal Support system is operated in the most efficient manner.
- ¶552 An annual cap on the amount of funds available to schools and libraries should be established.
- ¶554 (It is estimated that) the total cost of the communications services eligible for discounts would be approximately \$3.1 to 3.4 billion annually during the first four years and approximately \$2.4 to 2.7 billion in subsequent years.
- ¶ 555 The following matrix of percentage discounts should be applied in the schools and libraries program.

DISCOUNT MATRIX

HOW DISADVANTAGED?	COST OF SERVICE (Estimated percent in category)		
Based on percent of students in the national school lunch program (Estimated percent in category)	low cost (67%)	mid-cost (26%)	highest cost (7%)
< 1 (3%)	20	20	25
1-19 (30.7%)	40	45	50
20-34 (19%)	50	55	60
35-49 (15%)	60	65	70
50-74 (16%)	80	80	80
75-100 (16.3%)	90	90	90

¶ 556 An annual cap on spending should be set at \$2.25 billion per year. Any funds not disbursed in a given year may be carried forward and may be disbursed in subsequent years without regard to the cap. If expenditures in any year reach \$2 billion, rules of priority would come into effect in which only those schools and libraries that are most economically disadvantaged and had not yet received discounts from the universal service mechanism in the previous year



would be granted guaranteed funds, until the cap was reached.

The Joint Board, as part of its review in the year 2001, should revisit the effectiveness of the schools and libraries program.

c. Schools Located in High Cost Areas

¶560 The statutory definition of "affordable" must take into account the cost of service in an area. Thus, it is recommended that the FCC take into account the cost of providing services when setting discounts for schools and libraries.

The FCC should consider a "step" approach that would calibrate the cost of service in some reasonable, practical, and minimally burdensome manner. The Commission is encouraged to seek additional information and parties' comments on this issue prior to adopting rules.

d. Economically Disadvantaged Schools

- ¶ 561 Economically disadvantaged schools and libraries should be provided a greater level of discount for services.
- ¶ 562 (It is agreed that) access to telecommunications and other covered services should not increase existing disparities between economically disadvantaged students and their more affluent peers and that economically disadvantaged schools and libraries should therefore be eligible for a greater discount.
- ¶ 564 In order to minimize any additional record keeping or data gathering obligations, the least burdensome manner to determine the degree to which a school or library is economically disadvantaged should be used.

Using a single measure of economic disadvantage and a model already familiar to most schools and libraries would likely be the least administratively burdensome approach.

The national school lunch program fulfills both of these criteria, but the Joint Board remains open to other approaches that may also prove to be both minimally burdensome for schools and libraries and accurate measures of economic disadvantage.

Additional information should be sought on what measures of economic disadvantage may be readily available for identification of economically disadvantaged non-public schools or, if not readily available, what information could be required that would be minimally burdensome.

\$\\$565 (It is believed) that using the national school lunch program to determine level of discount



7

- appears to fulfill more accurately the statutory requirement to ensure affordable access for schools and libraries.
- ¶ 566 If the national school lunch program is used as the model for determining eligibility for a greater discount, it is recommended that the FCC require schools to certify to the administrator and to the service provider the percentage of its students eligible for the national school lunch program when ordering telecommunications and other covered services from its service providers.
- ¶ 567 Unduly burdensome reporting and accounting requirements should not be imposed on school districts, but individual schools with the highest percentages of economically disadvantaged students should receive the steepest discounts.
 - The school district office should certify to the administrator and to the service provider the number of students in each of its schools who are eligible for the national school lunch program. The district office may decide to compute the discounts on an individual school basis or it may decide to compute an average discount, but each school should receive the full benefit of the discount to which it is entitled.
- ¶ 568 Schools or districts that do not participate in the national school lunch program need only certify the percentage of their students who would be eligible for the program, if the school or district did participate.
 - Since libraries do not participate in the national school lunch program, it is recommended that they be eligible for discounts based on the school district(s) in which they are located.
- ¶ 569 A step approach for calculating the level of discount available to economically disadvantaged schools and libraries should be implemented. Such a step approach would not require adjustment for every change in the percentage of children eligible for the national school lunch program.
- ¶ 570 The categories used by the Department of Education for the national school lunch program, based on percentage of students eligible for free or reduced price lunches should be used as break points in the discount matrix: 0-19 percent, 20-34 percent, 35-49 percent, 50-74 percent; and 75-100 percent.
 - The FCC should also establish a separate category for the least economically disadvantaged schools--those with less than one percent of their students eligible for the national school lunch program.



e. Existing Special Rates

- \$ 571 States may supplement the discount financed through the federal universal service fund by permitting its schools and libraries to apply the discount to the special, state-negotiated low rates or states may choose not to supplement the federal program and thus prohibit its schools and libraries from purchasing services at special state-supported rates if they intend to secure federal-supported discounts.
- ¶ 572 Existing contracts between schools and libraries may be used as the "pre-discount price" from which discounts are calculated. No discount would apply, however, to charges for any usage of telecommunications or information services prior to the effective date of these rules.

f. Interstate and Intrastate Discounts

The FCC should recognize that it can provide for federal universal service support to fund intrastate discounts. It is also recommend that the Commission adopt rules that provide federal funding for discounts for schools and libraries on both interstate and intrastate services to the levels discussed above, and that establishment of intrastate discounts at least equal to the discounts on interstate services be a condition of federal universal service support for schools and libraries in that state. If a state wishes to provide an intrastate discount less than the federal discount, then it may seek a waiver of this requirement.

E. Restrictions Imposed on Schools and Libraries

- ¶ 593 To be eligible, schools must:
 - (1) meet the statutory definitions of elementary and secondary schools found in the Elementary and Secondary Education Act of 1965;
 - (2) must not operate as a for-profit business; and
 - (3) must not have an endowment exceeding 50 million dollars.

Libraries must be "eligible for participation in state-based plans for funds under title III of the Library Services and Construction Act," and must not operate as for-profit businesses.

Those institutions not directly eligible for support should not be permitted to gain eligibility by participating in consortia with those who are eligible, even if the former seek to further educational objectives for students who attend eligible schools.

¶ 596 Despite the difficulties of allocating costs and preventing abuses, the benefits from permitting schools and libraries to join in consortia with other customers in their community outweigh the danger that such aggregations will lead to significant abuse of the prohibition against resale.

State commissions should undertake measures to enable consortia of eligible and ineligible



9

entities to aggregate their purchases of telecommunications services and other services being supported through the discount mechanism.

- \$ 597 The Commission should prohibit the resale of all discounted services.
- ¶ 598 The prohibition of resale would not prohibit either computer lab fees for students or fees for Internet classes, because these are not services that schools or libraries purchased at a discount under the 1996 Act.

Schools and libraries would not be permitted to charge for the use of services they purchased at a discount pursuant to Section 254.

- \$599/ Schools and libraries should be expected to comply with three bona fide request requirements:
 - (1) they should certify to the administrator that they have adopted a plan to deploy all necessary hardware, software, and wiring, and to undertake the necessary teacher training required to use the services effectively, prior to ordering services eligible for a discount.
 - (2) schools and libraries should submit their requests for services in writing to the Fund Administrator who will register their request for service in the voluntary national electronic data bank.
 - (3) every school or library that requests services eligible for universal service support should be required to submit to the service provider a written request for services, including certification of their eligibility for support and agreement to abide by FCC rules.

In so doing the school must self-certify under oath that:

- (1) the school or library is an eligible entity under Section 254(h)(4);
- (2) the services requested will be used solely for educational purposes;
- (3) the services will not be sold, resold, or transferred in consideration for money or any other thing of value; and
- (4) if the services are being purchased as part of an aggregated purchase with other entities, the identities of all co-purchasers and the portion of the services being purchased by the school or library will be accounted.
- ¶ 605 Schools and libraries, as well as carriers, should be required to maintain procurement records for their purchases of discounted telecommunications and other covered services. Schools and libraries should be subject to random compliance audits to evaluate what services they are purchasing and how such services are being used.
- \$\ 606\$ While it is not recommended that the Commission require notification, service providers are encouraged to annually notify each school and library association and state department of



education in the states they serve of the availability of discounted services.

F. Funding Mechanisms for Schools and Libraries

- ¶ 611 The universal service administrator should distribute support for schools and libraries from the same source of revenue used to support other universal service purposes. No separate fund is intended for schools and libraries.
- Telecommunications carriers providing services to schools and libraries should either apply the amount of the discount afforded to schools and libraries as an offset to its universal service contribution obligations or should be reimbursed for that amount from universal service support mechanisms. Because non-telecommunications carriers are not obligated to contribute to universal service support mechanisms, they would not be entitled to an offset, therefore non-telecommunications carriers providing eligible services to schools and libraries would be entitled only to reimbursement from universal service support mechanisms.

G. Sections 706 and 708

- ¶ 618 The Joint Board declined to consider Section 706 in the context of this proceeding. (Section 706 requires the FCC and the states to encourage carriers to deploy "advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms)" through the utilization of "price cap regulation, regulatory forbearance, measures that promote competition in local telecommunications market, or other regulating methods that remove barriers to infrastructure investment."
- § 620 Section 708 is also not considered in the context of this proceeding, but should be considered further after implementation of Section 254. Section 708 covers the National Education Technology Funding Corporation, which provides additional opportunities for schools and libraries to increase the deployment of technology within their institutions through the development of public-private ventures to accelerate the dissemination of technology.

H. Access to Advanced Telecommunications and Information Services

¶ 629 Universal service support should be provided to schools and libraries for telecommunications services, Internet access, and internal connections.

I. Implementation

¶ 630 The FCC should adopt rules that will permit schools and libraries to begin using discounted services at the start of the 1997 - 1998 school year and may begin complying with the self-certification requirements as soon as the FCC rules become effective.

The Rural Policy Research Institute (RUPRI) has assembled a distinguished group of nationally



recognized rural telecommunications policy analysts and practitioners, to serve as an ongoing research and decision support resource for Congressional and state legislators, as well as federal and state regulators, to assist these decision makers in assessing the rural implications of their implementation and evaluative decisions regarding the Telecommunications Act of 1996.

This Rural Telecommunications Expert Panel was chosen to reflect geographic, disciplinary, and organizational diversity. It is anticipated that membership on this panel will expand, as the scope of this work broadens to address the expanding challenges within this policy decision process. Current Panel Members are listed below:

RUPRI Rural Telecommunications Expert Panel

John Allen, University of Nebraska - Lincoln
Don Dillman, Washington State University
Chuck Fluharty, Rural Policy Research Institute
Vicki Hobbs, Missouri Interactive Telecommunications Education Network
Craig Howley, ERIC Clearinghouse on Rural Education and Small Schools,
Appalachia Educational Laboratory, Inc.
Paul Stapleton, Superintendent, Charlotte, Virginia County Schools

This policy brief provides a summary of Section X of the "Recommended Decision of the Federal/State Joint Board on Universal Service: Support for Schools and Libraries", designed to inform FCC decisions which will implement Congressional intent regarding Section 254(h) of the Act. Panelist Vicki Hobbs provided primary analysis of these recommendations and authored this summary.

The Rural Policy Research Institute (RUPRI) conducts research and facilitates public dialogue designed to assist policy makers in understanding the rural impacts of public policies and programs. Through topical research, policy impact modeling, and national Expert Panels and Task Forces, RUPRI has established a reputation for bringing the best available science to public policy decision making.

This comprehensive approach to national rural policy analysis involves scientists from member institutions at Iowa State University, the University of Missouri, and the University of Nebraska, as well as researchers, practitioners and analysts from numerous universities, research institutes, and other organizations nationwide. To date, over 150 scientists representing 14 different disciplines in 60 universities and 43 states have participated in RUPRI projects. Currently, 50 nationally recognized scientists from 38 institutions serve as scholars on various RUPRI Expert Panels and Task Forces.

RUPRI Office 200 Mumford Hall University of Missouri Columbia, MO 65211 Phone: (573) 882-0316 FAX: [573] 884=5310

E-mail: rupri@muccmail.missouri.edu Visit our WWW site at: http://rupri.org





U.S. DEPARTMENT OF EDUCATION

Office of Educational Research and Improvement (OERI) Educational Resources Information Center (ERIC)



NOTICE

REPRODUCTION BASIS

This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.
This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket")

